DEFENSE SUPPLY CENTER RICHMOND
ENVIRONMENTAL RESTORATION PROGRAM

Operable Unit 6
&
Operable Unit 7

Treatability Studies

14 May 2007

DLA's Aviation Supply & Demand Chain Manager

Overview

DLA's Aviation Supply & Demand Chain Manager

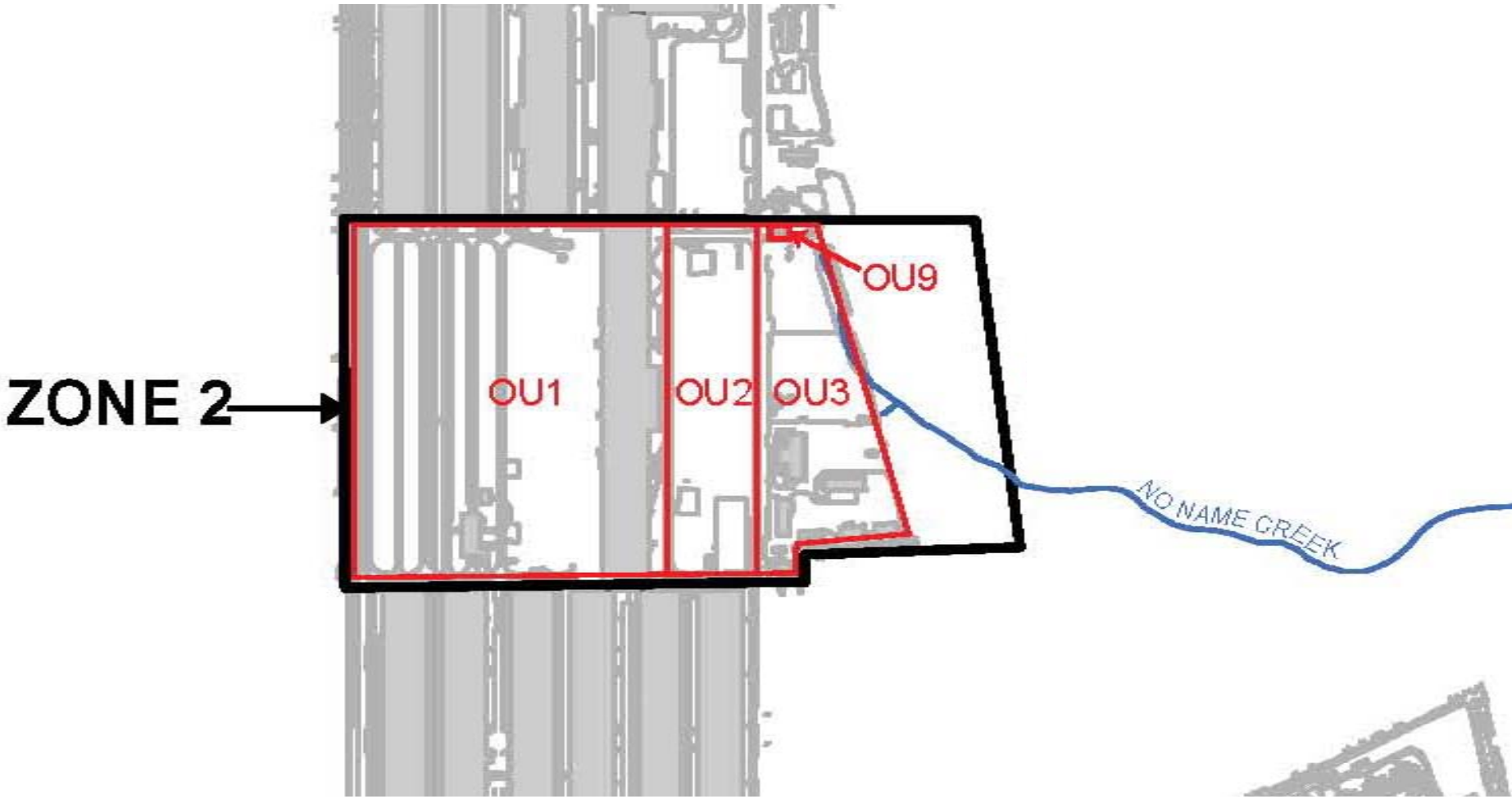
- Operable Unit (OU) 6 Background
- OU6 Treatability Study
- OU 7 Background
- OU7 Treatability Study

OU 6 Background

- Groundwater underneath OU 1, OU 2 and OU 3
- Primary contaminants of concern (COCs) are chlorinated volatile organic compounds (VOCs) such as Tetrachloroethene (PCE), Trichloroethene (TCE) and degradation products
- Remedial Investigation (RI) and Human Health Baseline Risk Assessment (HHBRA) completed for OU 6
- Biannual groundwater monitoring ongoing. Natural attenuation of groundwater COCs has been observed at OU 6

OU 6 Groundwater Site Map

DLA's Aviation Supply & Demand Chain Manager



OU 6 Area

DLA's Aviation Supply & Demand Chain Manager

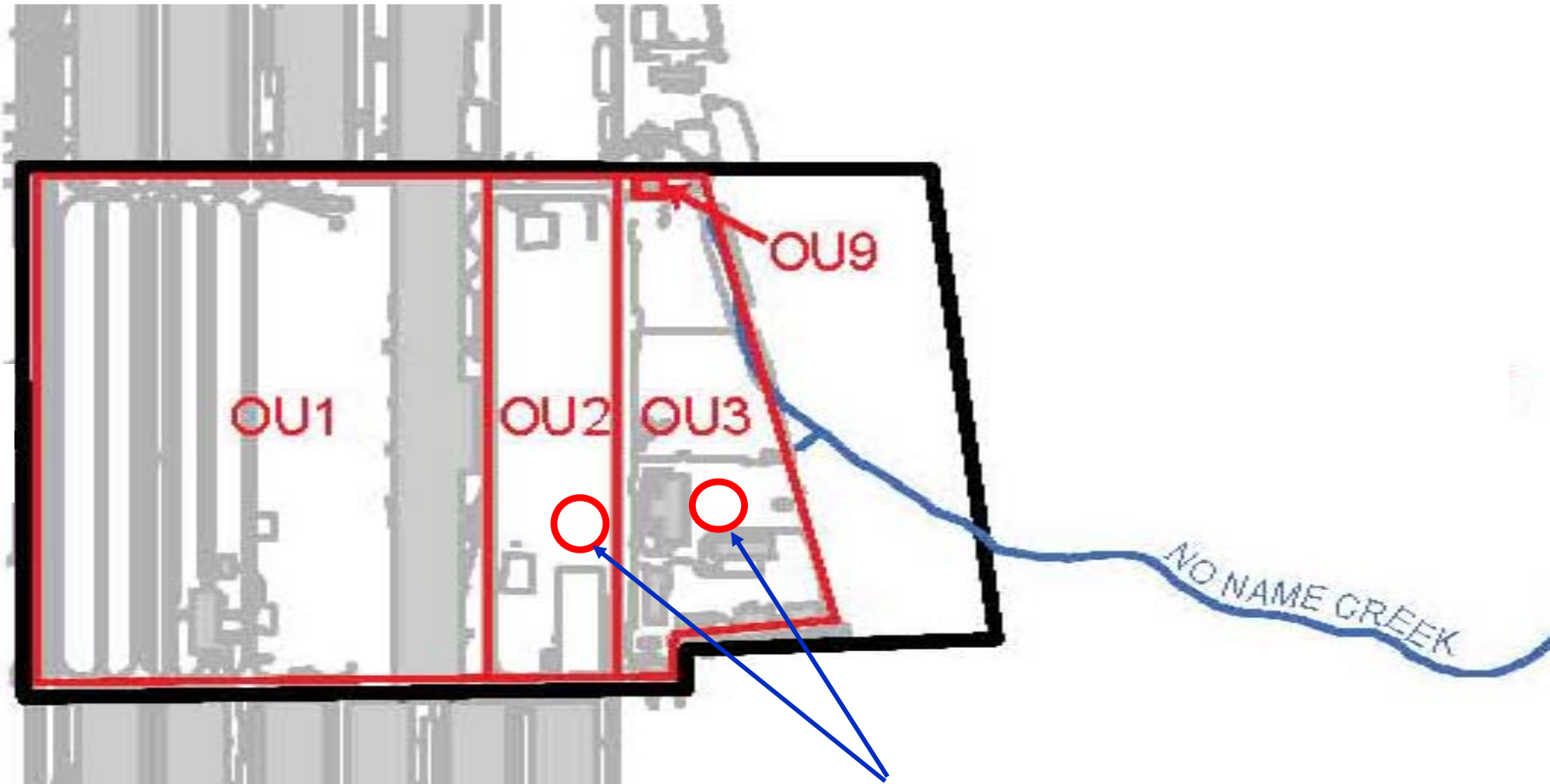
OU 6 Treatability Study

DLA's Aviation Supply & Demand Chain Manager

- **Treatability study will evaluate a technology that enhances the natural contaminant degradation at OU 6**
- **Proposed technology is enhanced in-situ biodegradation via edible oil emulsion**
- **Technology involves injection of an edible oil emulsion (oil/water mixture) into the contaminated groundwater**
- **Treatability study results will be incorporated in the OU 6 Feasibility Study (FS)**

OU 6 Treatability Study Areas

DLA's Aviation Supply & Demand Chain Manager



Proposed treatability study areas

Edible Oil Injection

DLA's Aviation Supply & Demand Chain Manager

Edible Oil Emulsion

OU 6 Treatability Study Schedule

- **Treatability study design site characterization – May 2007**
- **Treatability study implementation – Summer 2007**
- **Treatability study evaluation - Fall 2007 to Winter 2008**
- **Treatability study report and Feasibility Study - 2009**

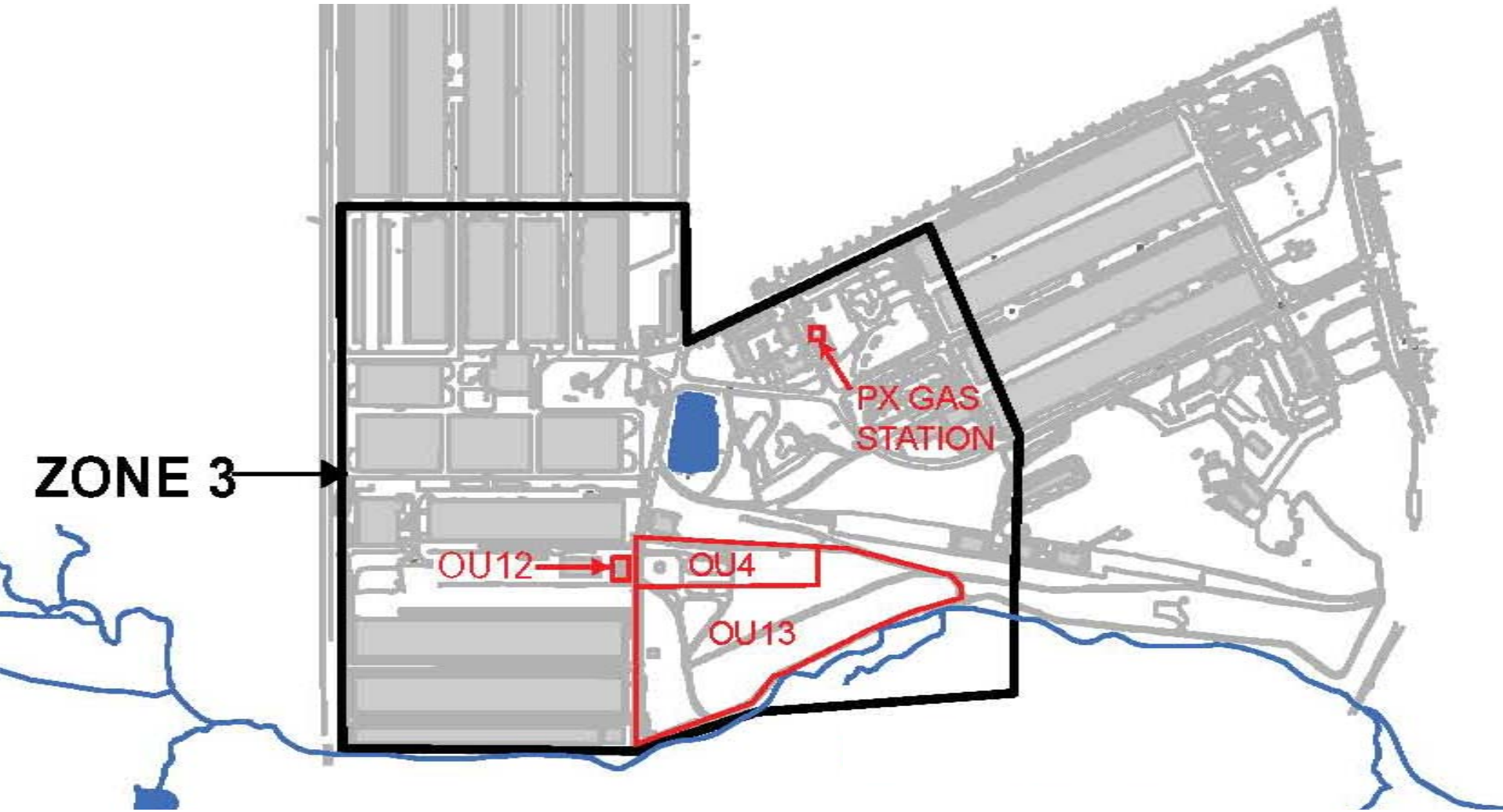
OU 7 Background

DLA's Aviation Supply & Demand Chain Manager

- Groundwater underneath to OU 4 and OU 13
- Primary COCs are chlorinated VOCs such as PCE, TCE and degradation products
- RI and HHBRA completed for OU 7
- OU 4 (former fire training pits 1 & 3) contaminated soil removal conducted in 2004
- Biannual groundwater monitoring ongoing. Natural attenuation of groundwater COCs has been observed at OU 7

OU 7 Site Map

DLA's Aviation Supply & Demand Chain Manager



OU7 Area

DLA's Aviation Supply & Demand Chain Manager

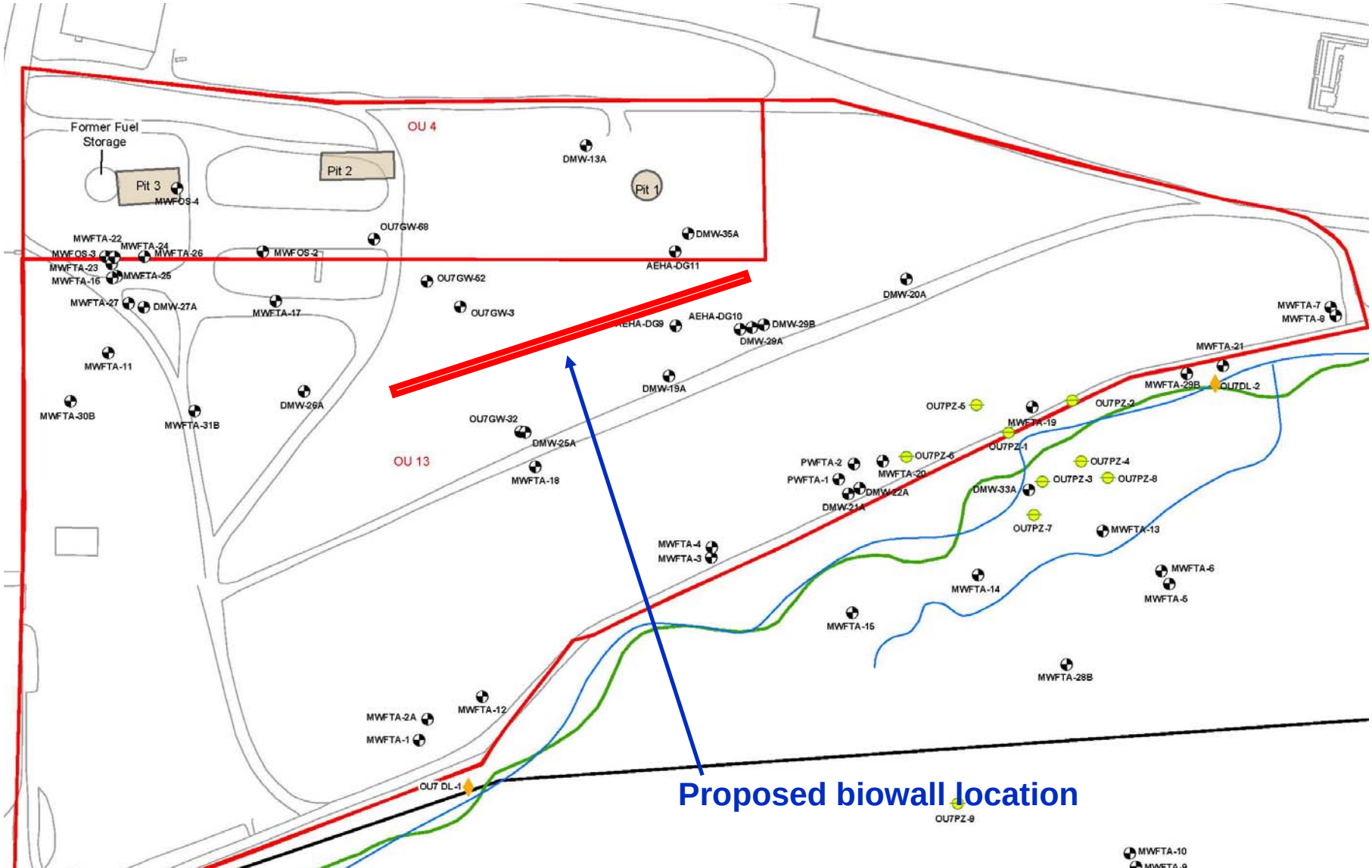
OU 7 Treatability Study

DLA's Aviation Supply & Demand Chain Manager

- Treatability study will evaluate a technology that enhances the natural contaminant degradation
- Proposed technology is enhanced in-situ degradation via installation of an Permeable Reactive “Biowall”
  - Biowall consists of bark mulch and sand mixture
- Technology involves treatment of contaminated groundwater as it flows through the biowall
- Treatability study results will be incorporated in the OU 7 Feasibility Study (FS)

OU 7 Treatability Study Area

DLA's Aviation Supply & Demand Chain Manager



Biowall Installation

DLA's Aviation Supply & Demand Chain Manager

OU 7 Treatability Study Schedule

DLA's Aviation Supply & Demand Chain Manager

- **Treatability study design site characterization – May 2007**
- **Treatability study implementation – Summer 2007**
- **Treatability study evaluation - Fall 2007 to Winter 2008**
- **Treatability study report and Feasibility Study - 2009**